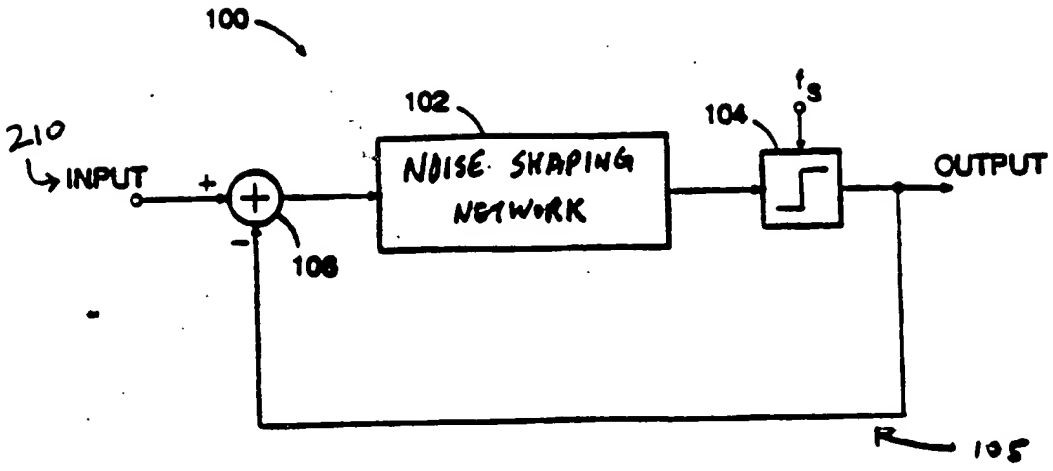
FIG. 1



PRIOR ART

FIG. 2A

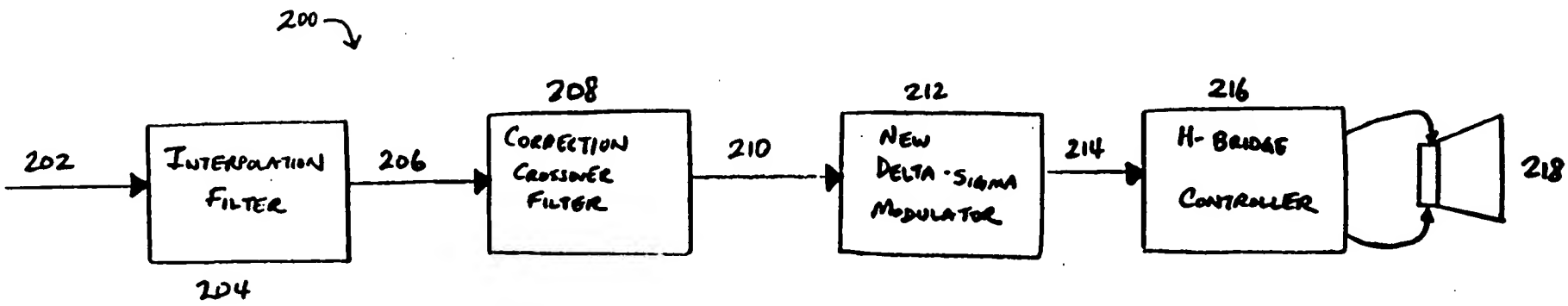

200
202
INTERPOLATION FILTER
204
206
208
CORRECTION CROSSOVER FILTER
210
212
NEW DELTA-SIGMA MODULATOR
214
216
H-BRIDGE CONTROLLER
218

FIG. 2B

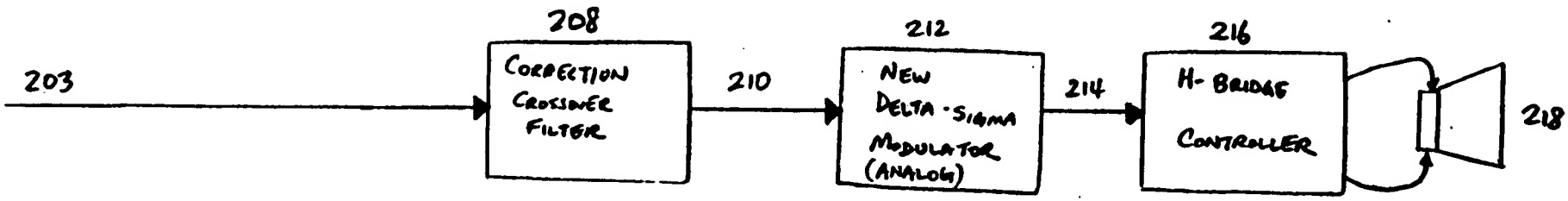

208
212
216
203
CORRECTION
CROSSOVER
FILTER
210
NEW
DELTA-SIGMA
MODULATOR
(ANALOG)
214
H-BRIDGE
CONTROLLER
218

FIG. 3

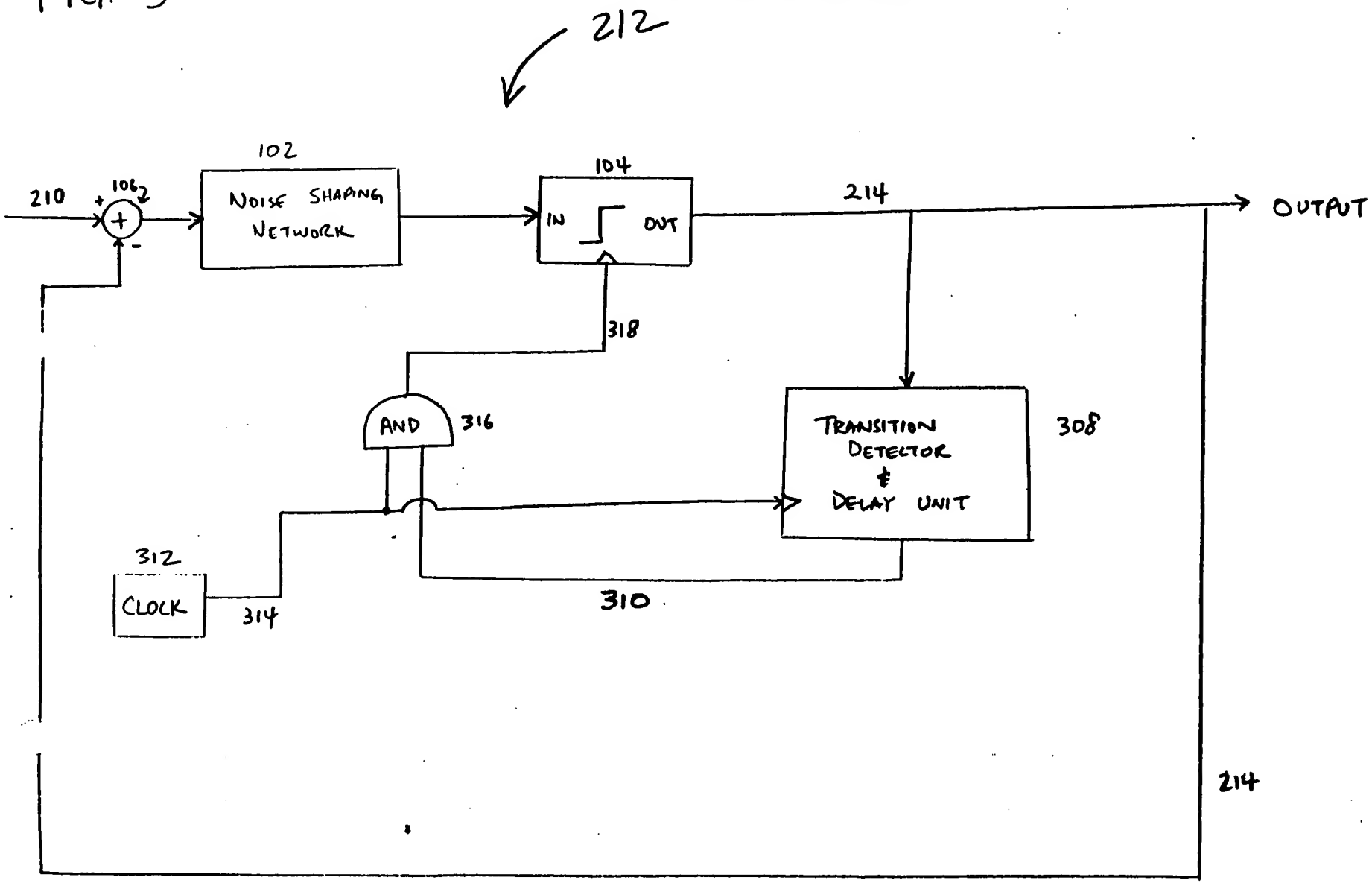

212
102
104
210
106
NOISE SHAPING NETWORK
IN
OUT
214
OUTPUT
318
AND
316
TRANSITION DETECTOR & DELAY UNIT
308
312
CLOCK
314
310
214

FIG 4

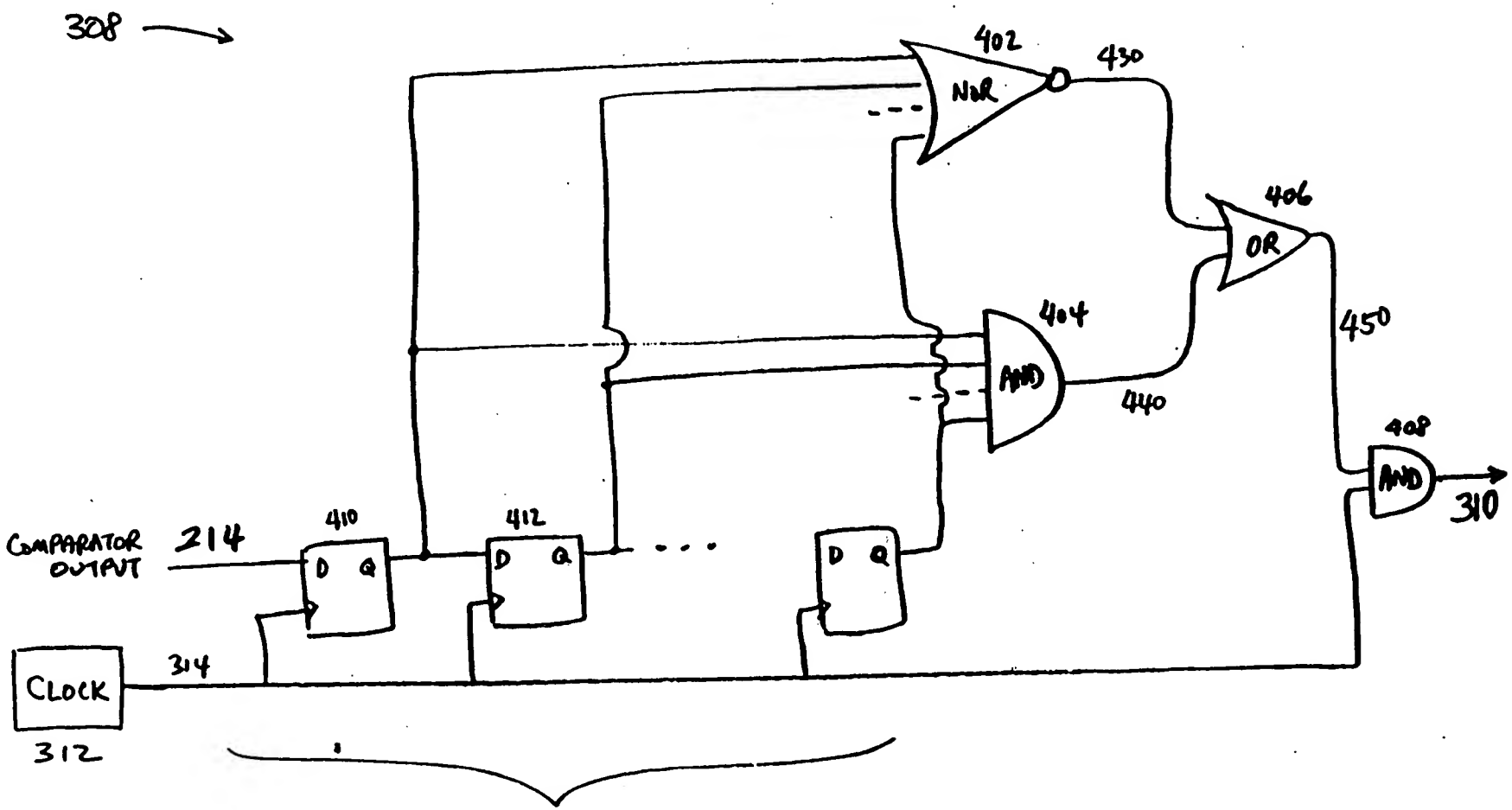
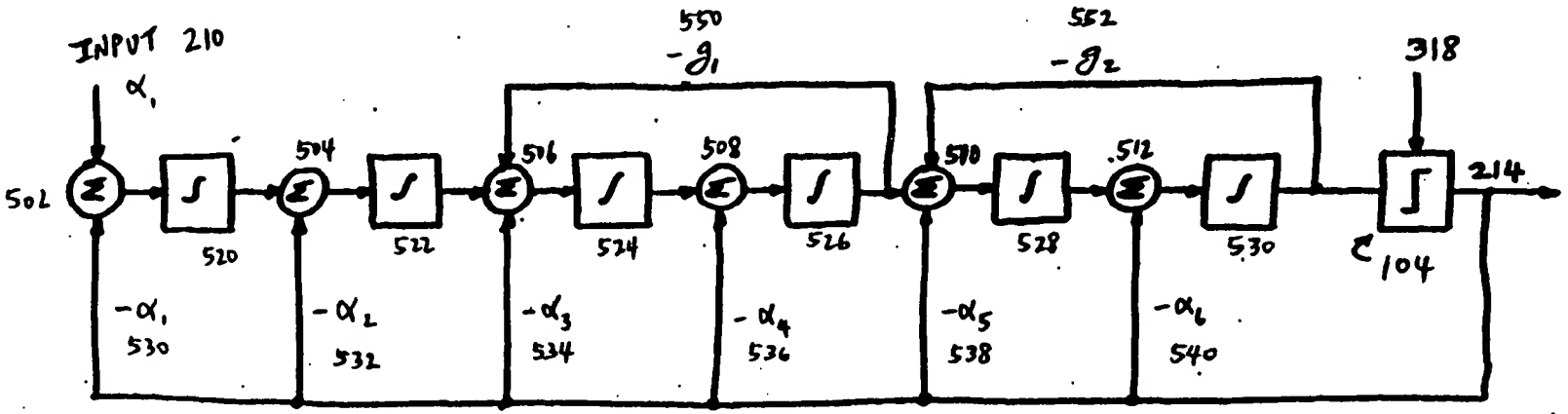

308
402
NOR
430
406
OR
404
AND
450
440
408
AND
310
COMPARATOR OUTPUT
214
410
412
D Q
D Q
D Q
CLOCK
312
314
N FLIP FLOPS

FIG. 5


INPUT 210
α_1
550
$-g_1$
552
$-g_2$
318
502
504
506
508
510
512
214
520
522
524
526
528
530
C 104
$-\alpha_1$ 530
$-\alpha_2$ 532
$-\alpha_3$ 534
$-\alpha_4$ 536
$-\alpha_5$ 538
$-\alpha_6$ 540

500

FIG. 6

TOWER 1,283,260

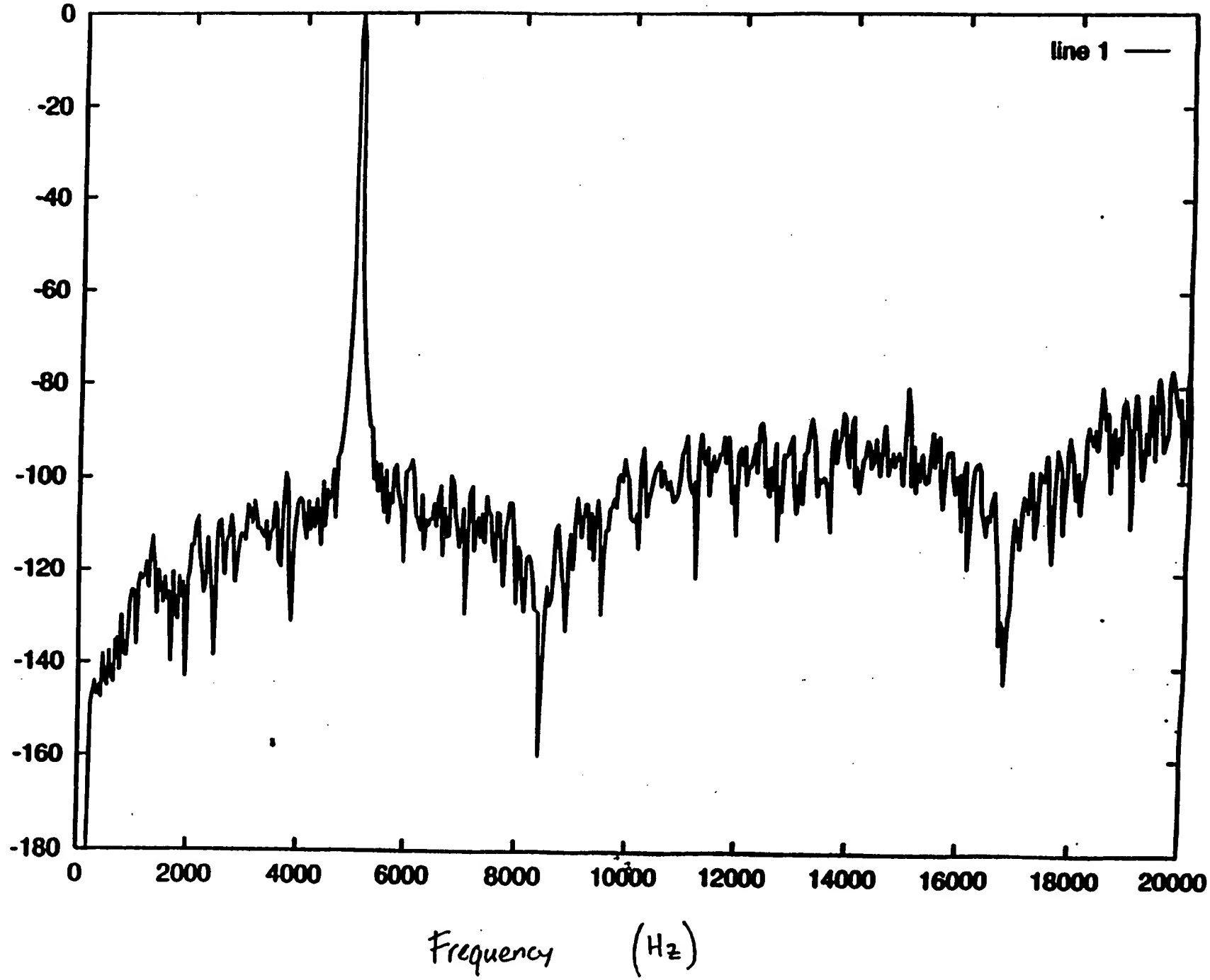


FIG. 7

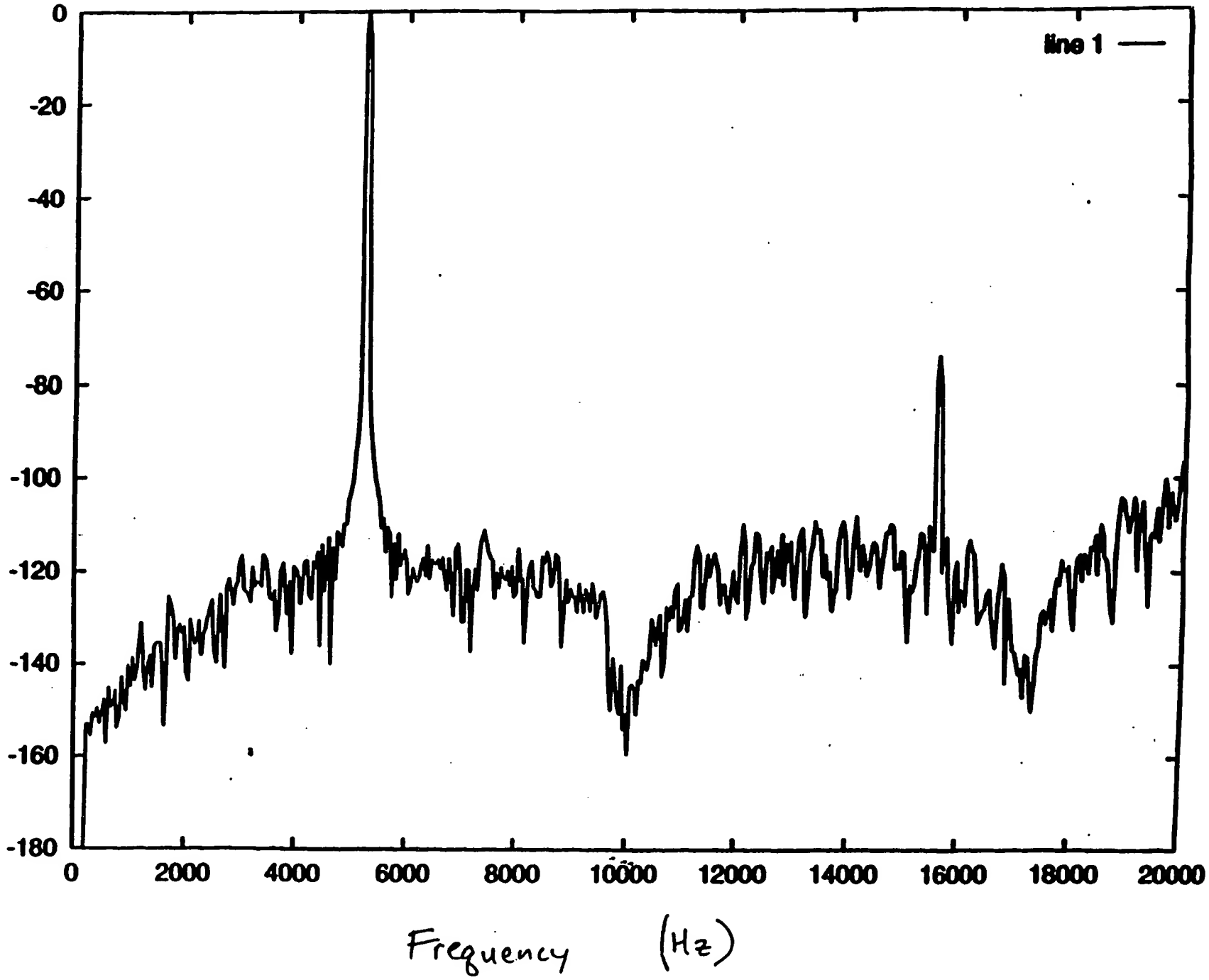
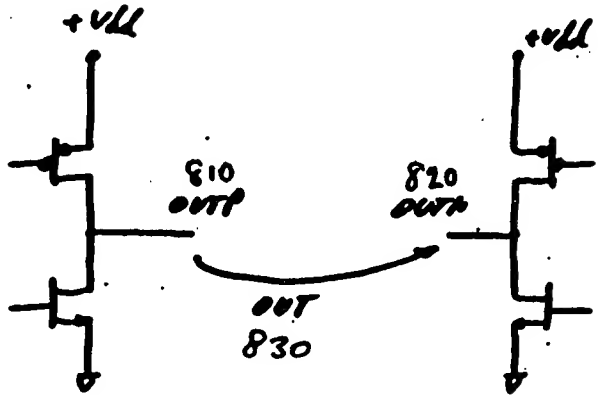

line 1
0
-20
-40
-60
-80
-100
-120
-140
-160
-180
0
2000
4000
6000
8000
10000
12000
14000
16000
18000
20000
Relative Amplitude (dB)
Frequency (Hz)

FIG. 8



(PRIOR ART)

FIG. 9

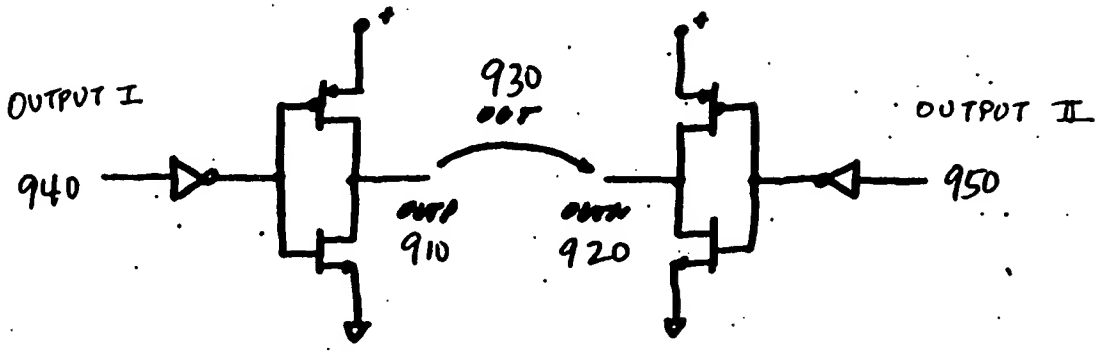
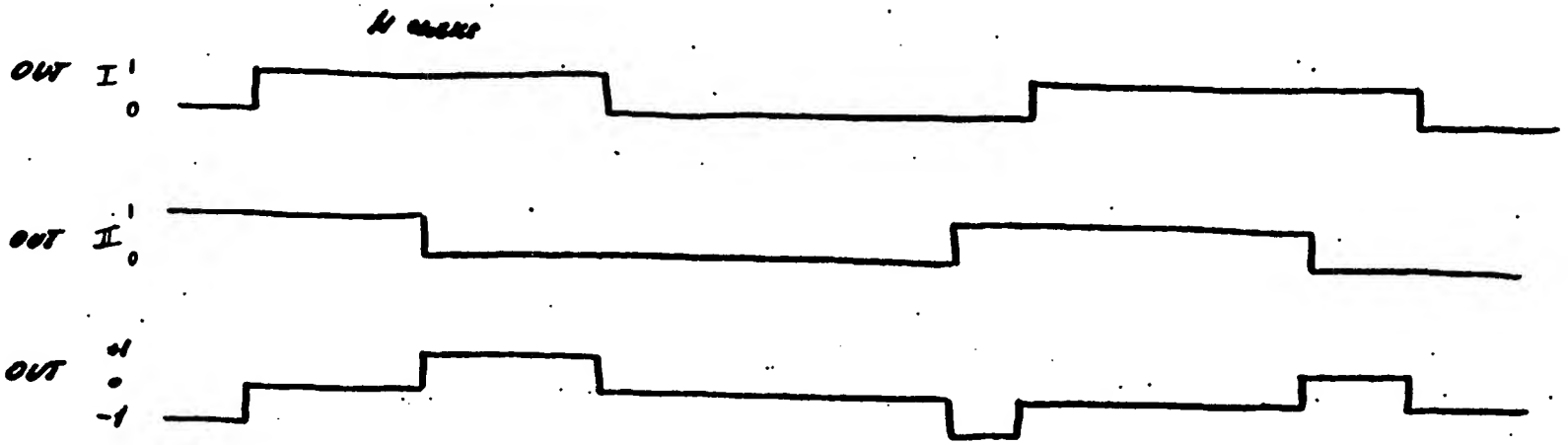



FIG. 10